

7 September 1999

Walter Hoye Metropolitan Water District Planning Division P.O. Box 54153 Los Angeles, CA 90054-0153

RE: Proposed Change of Scope for Turlock Irrigation District (TID) project, Restoration of the 7\11 Segment of the Mining Reach on the Tuolumne River, (7\11 Project).

Dear Walt,

The purpose of this letter is to seek approval by CALFED for the following:

- 1) An increase of \$707,000 in CALFED funds, a 14.7 % increase in the 7\11 Project cost, above the \$6,233,000 approved in 1997 (see Attachment 1);
- 2) Seven changes in scope for the 7\11 Project; and
- 3) Use of sole source contracting.

REQUEST 1: Request for an additional \$707,000 in project funding

Several potential scope changes were presented by TID at a 4 May 99 meeting between AFRP, CALFED and MWD with an estimated total increase in 7\11 Project costs of \$1,895,000. The TID was instructed to commence a value engineering process to identify where cost containment modifications could be made without compromising project functionality. The TID identified 16 project elements that could be removed or modified, several of which would affect project functionality. Minimizing impacts to project function was a key selection criteria with the 5 cost containment elements that were selected. In addition revised aggregate cost estimates were obtained from the mining industry. As a result of the value engineering process, the 7\11 Project needs an additional \$707,000, as detailed in Attachment 1. This is \$1,188,000 less than the scope change estimate presented at the meeting on 4 May 1999.



GS0910-03

REQUEST 2: Changes in scope of 7\11 Project

Attachment 1 outlines the scope changes sought with a brief description under "Comments". These changes in scope for the 7\11 Project are grouped into seven categories below.

Scope Change 1, emergency dike repair

The following two tasks were deleted from the scope because they could not be completed by October 1997 under the Corps of Engineers Emergency Flood Repair authorization.

Setback Dike Task 2A in the MJ Ruddy Segment:

- \$442,600

Bio-engineering Task 3A in the Warner-Deardorff Segment

- \$230,000

Total - \$672,600

Scope Change 2, environmental compliance and monitoring

The complexity of this project has resulted in significantly more and extensive environmental documentation and project permitting that added \$41,000 to the project costs. A full NEPA & CEQA process yielded a joint USFWS – TID EA\IS document with a mitigation and monitoring program and a public hearing process that added \$103,000 to the project costs. Pre-project monitoring costs increased \$7,000. In addition the TID has spent an added \$66,000 for the permits associated with the EA\IS.

Scope Change 3, conservation easements

After the AFRP and CALFED funding awards were made, the USFWS informed TID that conservation easements would be required to assure that project features would be protected in perpetuity. Since this is an active aggregate mining area the cost to acquire such easements will include the purchase of mineral rights that underlie the easement area. Given the significant limitations imposed on the property by the terms of the easements, the compensation value for the easement is essentially the full market value.

Mineral Rights purchase + \$280,000
Conservation Easement Rights-of-Way + \$325,000
Total + \$605,000

Scope Change 4, design changes in response to regulatory requirements

The Reclamation Board requirements for maintenance of upstream water surface elevations during high flow events designed for fluvial processes resulted in the need for a bypass bridge adjacent to the 7\11 access bridge and added \$275,000 to the 7\11 Project costs.

The north bank protection work was originally thought to have been included under a pre project DFG 1603 permit for the 7\11 Bridge. Adding bioengineering to protect the upstream approach to the bridge added \$70,000 to the costs.

Scope Change 5, irrigation of revegetation plantings

Mitigation in the EA\IS requires assurances that a high percentage of the revegetation planting on the floodplain and in the bio-engineering areas will not only survive initial planting, but will become established. Experience with mitigation of a 4-Pumps project in the adjacent MJ Ruddy Segment indicated that supplemental irrigation after initial planting would be needed to increase revegetation survival. Installation, operation and maintenance of portable irrigation equipment for two seasons will add \$275,000 to the 7\11 Project costs.

Scope Change 6, materials cost increases

When the 7\11 Project concept was first prepared in June 1997 it was estimated that 439,000 cubic yards of aggregate would be purchased at prices ranging between \$3.00 per ton and \$3.75 per ton. At the 4 May 1997 meeting with AFRP and CALFED the engineering estimate at the 90% design stage called for 553,000 cubic yards of material with prices that had increased by \$2.00 per ton (33%). Through a redesign evaluation, quantities of aggregate required were reduced by narrowing the floodway corridor width by up to 50 feet in some areas and lowering floodplain surface elevations without impacting project functionality. In addition, TID negotiated with the aggregate industry to reduce the materials prices by 20% from \$5.00 per ton to \$4.00 per ton. The haul and handling cost have remained unchanged. After the cost containment design changes were made, the quantity of materials was reduced by 97,000 cubic yards (-18%) to 456,000 cubic yards, helping to offset the effects of material cost increases, from \$1,484,000 to \$1,824,000.

Scope Change 7, contingency vs construction management

The original scope of work listed "Project & Construction Management" as 13% of total project costs. This was labeled incorrectly and should have been Project Management 3% and Contingency 10% of total costs. The cost for actual "Construction Management" was left out of the original proposal. The project engineers for TID have indicated that Construction Management needs to be added to the project costs, based on 6% of only construction related costs, adding \$284,000 to the 7\11 Project costs.

REQUEST 3: Sole Source Contracting

The TID would like to pursue sole source contracts for the Mining Reach restoration projects because the access, construction, and scheduling flexibility combined with internal aggregate sources of material supplies should provide cost savings measures. A sole source will allow flexibility to negotiate prices for aggregate materials, since these can be hauled by off road vehicles within the project area. This is a complex restoration project that will require flexibility in scheduling work and making field adjustments. There are only certain times of the year when construction in the stream channel can occur, yet turbidity limitations may require construction activities to be moved around the construction site. Under a sole source contract, the mining operator can better adjust to such schedule changes because the mining companies in the Mining Reach are affiliated with heavy construction companies and equipment used in the mining

operations can also be used for the project. Access is limited in and through some project areas and controlled by the local mining operator. It will be easier for the local operator to schedule around such constrictions than an outside construction firm. The cost issues also include delay of work and re-mobilization charges by an outside firm that should be avoided by using the local operator.

The use of a sole source contract will still require the local operator to prepare a detailed bid document, as if this were a competitively bid public works construction project, and construct according to specifications for the project. This is intended to provide the quality assurances for the project elements. TID will also pay an outside firm to prepare a separate bid estimate as a way of cross checking the sole source "bid".

One of the biggest cost elements in these restoration projects is the price of the aggregates and the distance to haul the materials. The projects are restricted by Department of Conservation regulations to only using materials from an approved mining operation under appropriate County use permits. The EA\IS process required identification of the anticipated source site and the mitigation associated with each site. The haul distance for a sole source bidder is much closer than that for materials coming from another permitted site so this cost element is lower. TID will, however, be competing for these permitted sources of materials against the current construction demand and anticipate the raw material cost will be market driven.

TID is continuing to pursue aggregate mining exemptions from Tuolumne County and SMARA under the Department of Conservation to allow use of up to 300,000 cubic yards of debris washed into La Grange Lake from the Don Pedro spillway during the January 1997 floods. This material is suitable for use as a source of aggregate fill material in the projects and use of this material would qualify as aggregate mining mitigation identified in the EA\IS.

PROJECT FUNDING SOURCES

Current and proposed funding is shown in Attachment 1. To date \$6,428,000 has been approved, as shown on lines 59 through 62. The TID proposes that the additional project need for \$707,000 be met through the CALFED contract and budget modification process. The project currently has funding, or a funding commitment, from four sources: 1) AFRP at \$2,856,000, 2) CALFED Category III fund at \$2,801,000, 3) Federal Bay Delta Act funds, administered by AFRP, at \$655,000, and TID contributions of \$116,000.

The TID has actively worked to minimize the up front 7\11 Project cost increases through the cost containment actions detailed above. In addition, through the conservation easement process with the landowners and mining operators, TID has made a commitment to maintain the project facilities in perpetuity. This includes maintenance and repair of any dike breach due to flood events, indemnification of the landowners for project construction, maintenance, and monitoring related activities, and payment of taxes on easement lands. Such actions represent unknown future costs, but a dike breach repair is estimated to cost \$250,000.

Next Steps

4

As we have discussed, please forward this scope change and funding request to CALFED. If you have any questions please call me at 209-883-8316. Thank you for helping to work through this complex process.

Sincerely,

TURLOCK IRRIGATION DISTRICT

Wilton B. Fryer, P.E.

Water Planning Department Manager

ce: Scott Spaulding, AFRP
Peter Jacobsen, CALFED